Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-11 (Canceled).

Claim 12 (Previously presented): Morpholino-nucleotide corresponding to the formula:

HO
$$\stackrel{O}{=}$$
 $\stackrel{O}{=}$ $\stackrel{O}{=}$ $\stackrel{O}{=}$ $\stackrel{O}{=}$ $\stackrel{O}{=}$ $\stackrel{O}{=}$ $\stackrel{P}{=}$ \stackrel

in which R^1 is adenine and R^2 represents -CH₂-COOH, -(CH₂)₄-NH₂ or -(CH₂)₄-NH-R³ wherein R^3 is fluorescein.

Claim 13 (Previously presented): Morpholino-nucleotide of formula:

in which R^1 is thymine and R^2 represents -CH₂-COOH, -(CH₂)₄-NH₂ or -(CH₂)₄-NH-R³ wherein R^3 is fluorescein.

Claim 14 (Previously presented): Morpholino-nucleotide corresponding to the formula:

in which R^1 is cytosine and R^2 represents -CH₂-COOH, -(CH₂)₄-NH₂ or -(CH₂)₄-NH-R³ wherein R^3 is fluorescein.

Claim 15 (Previously presented): Morpholino-nucleotide corresponding to the formula:

in which R^1 is guanine and R^2 represents -CH₂-COOH, -(CH₂)₄-NH₂ or -(CH₂)₄-NH-R³ wherein R^3 is fluorescein.

Claims 16-33 (Canceled).